



DEFENSE LOGISTICS AGENCY

AMERICA'S COMBAT LOGISTICS SUPPORT AGENCY



Evolving Parts Standardization

Christine Metz
August 2011

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE AUG 2011		2. REPORT TYPE		3. DATES COVERED 00-00-2011 to 00-00-2011	
4. TITLE AND SUBTITLE Evolving Parts Standardization				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Defense Logistics Agency, 8725 John J Kingman Rd, Fort Belvoir, VA, 22060-6218				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES Presented to: DMSMS and Standardization Conference, Hollywood, FL Aug 29-Sept 01, 2011					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 10	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



Scope of DLA Customer Support

- Supports nearly 1,600 weapon systems
- Provides 84 percent of all Military Services' repair parts
- Managing 4.8 Million national stock numbers via eight supply chains
- Processes an average of 230,000 requisitions a day
- Awards an average of 11,000 contract lines a day
- Provides 100 percent of:
 - Fuels
 - Food
 - Clothing and Medical Supplies
 - Construction Material
- Worldwide Presence:
 - More than 25,000 civilian, active duty, and reserve employees
 - 28 countries and 48 states (except Vermont and Iowa)

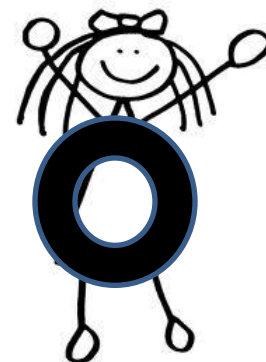




Parts Proliferation Problem

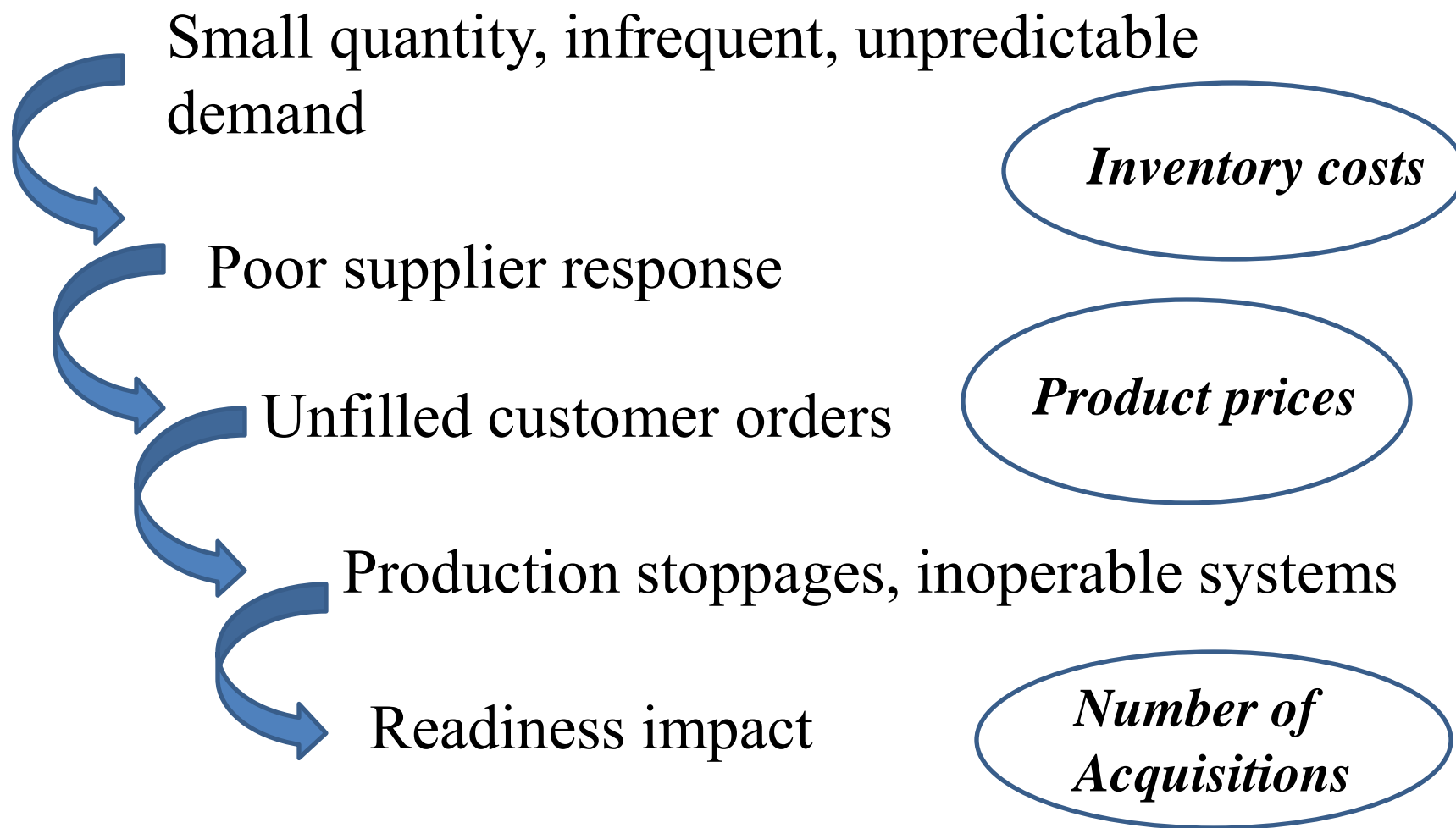
What do 180,000 connectors, 423,000 fasteners, and 44,000 O-rings have in common?

- DLA managed items in the Federal catalog
- 70% to 80% are not routinely purchased
- Vast majority have very limited description
- Thousands identified with non-manufacturer part numbers
- Hundreds of exact or functional duplicates





Impact of parts proliferation on Acquisition





Ability to impact parts proliferation

- Limited at DLA
 - Legacy systems with MIL-STD-965 requirements
 - Few parts review for MIL-STD-3018
- Standardization decisions happen during design
 - System integrators, subsystem manufacturers, & Service design control activities
 - Help designers use existing parts when appropriate
- Body of data is huge where there are part proliferation issues
- Item reduction is not effective



Three Pilot Projects

What we've learned . . .

- Parts proliferation is not government unique
- We can
 - collaborate with industry SMEs to identify significant characteristics for parts selection
 - share data across DoD & company lines to develop more complete item descriptions
 - identify exact duplicates, functional equivalents, and additional sources of supply
- The technology is a “game changer”



Current State

NORTHROP GRUMMAN

CAGE: 00779
Part No: 1-480698-0
CONNECTOR, PLUG, MATE N
LOCK, 2 POSITION

Tyco Electronics

Universal MATE-N-LOK Connector
Part Number 1-480698-0

EU RoHS/ELV Compliant



TYCO ELECTRONICS
PRODUCT CHANGE
NOTIFICATION E-07-02543

**JAMECO
ELECTRONICS**

Connector Housing Receptacle 2
Position 6.35mm Straight Loose Piece
Manufacturer AMP
Catalog no. 526731
Price: \$0.25
Shipping: 3 days ARO

**INFORMATION INTEGRATION
FROM THE SUPPLY WEB**

Defense Supply Center Columbus

CONNECTOR, RECEPTICAL,
ELECTRICAL,
PLUG HOUSING
Drawing No. 87097-001

45 DIFFERENT
WEAPON SYSTEMS
FROM MULTIPLE
SERVICES

Defense Logistics Information Service

CONNECTOR BODY, PLUG, ELECTRICAL
NSN 5935010961872



Advantage!

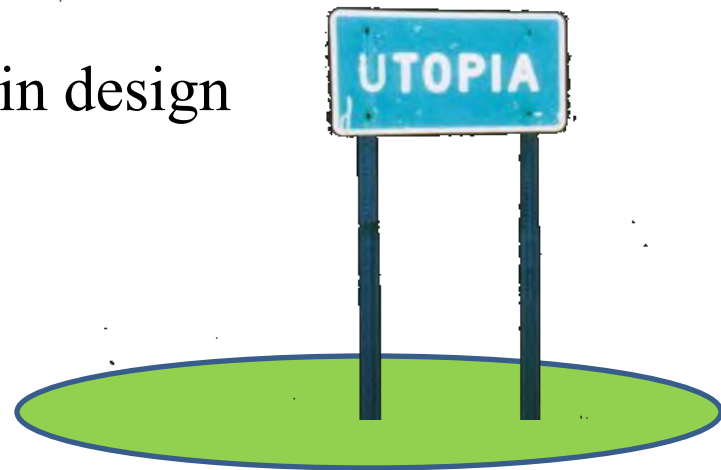
Newark Electronics Allied Electronics John B Ruby





Ideal Future State

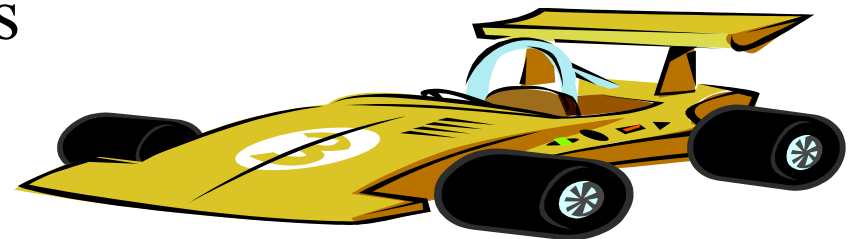
- Single database of connectors shared & maintained by DoD and defense industry
- Defined set of core characteristics
 - Commonly understood
 - Significant for parts selection
 - Values populated for items in the database
 - Associated information on usage, availability, price, environmental characteristics
- Sufficient variety of items for flexibility in design selection
- Business rules for access and sharing





Time for a new model . . .

- More open data sharing for targeted commodities
- Access to more complete item information for parts selection
- Standardization by natural selection
 - Performance characteristics
 - MIL-STD-3018
 - Availability, usage on other systems, environmental preferences





Next Steps

DoD Connector Standardization Working Group

- DSPO letter to Standardization Executives
- Common use connector parts lists
- Data sharing infrastructure
- Process for selection of future preferred connectors

DLA R&D project on supporting infrastructure

- Database
- Ontology
- Role based security
- Data translation
- Communication channels
- Workflow management